Central National Technology Support Center

April 2010

In This Issue...

Highlights in History

April 27, 1935

FDR signed the Soil Conservation Act creating the ***Soil Conservation Service (SCS)*** in the U.S. Department of Agriculture.

October 20, 1994

The SCS received a new name, the ***Natural Resources Conservation Service (NRCS)***, to better reflect its efforts to conserve all resources.

Contact Information:

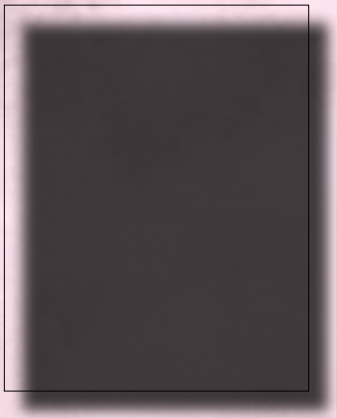
USDA- Natural Resources Conservation Service
501 West Felix, Building 23
Fort Worth, Texas 76115
Phone - 817-509-3328
Fax - 817-509-3336
www.nrcs.usda.gov/about/ntsc/central/

Director's Message

I would like to take this opportunity to add my congratulations on the 75th anniversary of the Natural Resources Conservation Service.

Founded as the Soil Conservation Service in 1935 by Franklin D. Rosevelt, the new agency was designed to carry out a continuing program of soil and water conservation on America's privately owned farms, ranches, and forest lands.

As the agency's first chief, FDR appointed Hugh Hammond Bennett. a well-traveled and internationally renown soil scientist, who had been warning of the consequences of poor land management for decades.

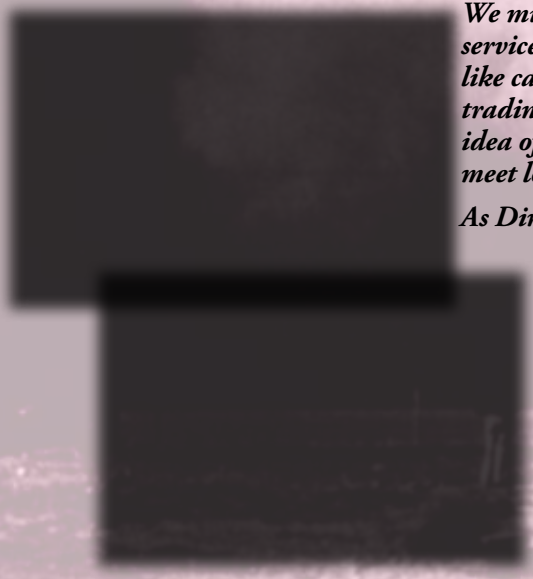


Hugh Hammond Bennett, the first chief of the Soil Conservation Service.

As a scientist himself, Bennett emphasized the importance of sound science from the very beginning. He knew that when you ask farmers and ranchers to voluntarily change the way they do business and spend money to benefit the environment, you'd better be sure you can tell them why it matters.

Sound science remains fundamental to our work and to our ability to help people help the land. President Obama has made restoring science to its rightful place a cornerstone of his administration, too.

The Central National Technology Support Center (CNTSC) staff continues Chief Bennett's legacy of sound science. Today, 75 years later, as we continue to address complex issues like climate change, hypoxia in the Gulf of Mexico, loss of open space and ecosystem management, the value of sound science to use in decision making and developing innovative technologies becomes even more important to our mission.



We must expand the range of environmental services provided from working lands—services like carbon storage and water quality credit trading. And we must continue to champion the idea of voluntary, incentives-based conservation to meet local needs.

As Director of the CNTSC, I pledge my continued committment to Chief Bennett's legacy of sound science-based solutions to voluntary, incentives-based conservation on private lands. We look forward to meeting your technology transfer and training needs.

RONALD C. WILLIAMS
CNTSC Director

75 Years Helping People Help the Land

Core Team Activities

Submerged Aquatic Vegetation Studies in Coastal Louisiana

Submerged aquatic vegetation (SAV) is important to Louisiana coastal ecosystems for minimizing storm damage by reducing wave action, stabilizing sediments, improving water quality by absorbing nutrients and contaminants, and providing critical habitat for wintering waterfowl and many commercially important fish species. The Golden Meadow Plant Materials Center (PMC) in Galliano, Louisiana, through a cooperative effort with the Barataria-Terrebonne National Estuary Program, is developing propagation techniques for the American wildcelery *(Vallisneria americana),* one of the primary SAV in the Louisiana coastal ecosystem.

American wildcelery is grown in underwater containers for future coastal transplantation.

Currently, the PMC has found that American wildcelery can be harvested from Louisiana coastal area native stands, grown in 4-inch containers, and submerged in 300-gallon polyethylene tanks for further growth and development prior to field planting. Joel Douglas, CNTSC Plant Materials Specialist, has been assisting the PMC with additional greenhouse studies to evaluate the effectiveness of shading the tanks to reduce light intensity inside the propagation tanks. Other studies will evaluate different containers on productivity of American wildcelery and methods for successfully establishing the plant in coastal Louisiana parishes.

For additional information, contact Joel Douglas, CNTSC Plant Materials Specialist, at 817-509-3419, or joel.douglas@ftw.usda.gov.

SITES Workshops Conducted

SITES (Stability & Integrity Technology for Earth Spillways) Workshops were conducted in Fort Worth, TX on January 26-27, 2010, and February 2-3, 2010. A third workshop was conducted in Des Moines, IA on March 22-23, 2010.

SITES is a computer program that will analyze the hydrology and hydraulics for design of typical NRCS dams and ponds. The software will design a dam or pond to comply with the NRCS criteria contained in either Practice Standard 402 for Dams or 378 for Ponds. The SITES computer model is instrumental in the design and rehab of watershed dams.

For training in the use of SITES for the design of ponds and dams, contact Tony G. Funderburk, CNTSC Agricultural Engineer, at 817-509-3289 or tony.funderburk@ftw.usda.gov

Sage-grouse Initiative

Secretary Vilsack recently announced that USDA/NRCS will use up to $16 million through the Environmental Quality Incentives Program (EQIP) and the Wildlife Habitat Incentives Program (WHIP) in 11 States to provide financial assistance for producers who improve sage-grouse habitat and reduce threats to the birds. CNTSC biologists Steve Brady, Bill Hohman, and Romy Myszka, are helping States prepare for a combination of net-meeting presentations and field sessions and exercises during May 2010.

The sage-grouse, a ground-dwelling bird native to the sagebrush steppe ecosystem, has experienced a significant decline in population and habitat. The birds, found at elevations ranging from 4,000 to more than 9,000 feet, are highly dependent on sagebrush for food and cover.

The sage-grouse initiative will help the 11 States respond proactively to a recent U.S. Department of Interior (DOI) announcement that the greater sage-grouse warrants protection under the Endangered Species Act (ESA) and will be designated a candidate species. However, it will not be listed because of the need to focus on higher priority species. Because of the DOI decision not to list the sage-grouse, landowners will have additional time to take action to protect the species. NRCS has been working at the local, state, and national levels on behalf of voluntary sage-grouse conservation for many years and will intensify its efforts in the future.

For additional information, contact Romy Myszka, CNTSC Biologist, at 817-509-3330 or romy.myszka@ftw.usda.gov.

Revised ESIS Database Released

Finally, after several years of database development, the revised Ecological Site Information System (ESIS) database is being released. The ESIS changes were necessary to address emerging science, technical needs, and recommendations provided by users. ESIS has been the official NRCS repository for Ecological Site Descriptions (ESD) for forest and rangeland for years and through this revision, the database will now also serve as the repository for Forage Suitability Group Descriptions (FSGD). The ESIS web address is: http://esis.sc.egov.usda.gov/.

For additional information review National Bulletin 190-10-15, Ecological Site Information System Revision Release. The bulletin was transmitted through the e-mail process on April 2, 2010, and can be accessed through the following web address: http://directives.sc.egov.usda.gov/viewerFS.aspx?hid=26705

Live Meeting net conference training will be hosted by NTSC specialists and CNTSC Grazing Lands Team for appropriate State Soils and Ecological Sciences staffs. For further information, contact Homer Sanchez, CNTSC Rangeland Management Specialist, via email at homer.sanchez@ftw.usda.gov.

Wetland Team Highlights

The CNTSC Wetland Team is coordinating the 5-year revision of Wetland conservation practice standards:

- 657 - Wetland Restoration
- 658 - Wetland Creation
- 659 - Wetland Enhancement

The team is also preparing for the delivery of three Wetland Restoration and Enhancement courses and one Hydrology Tools for Wetland Determination course.

For more information, contact Richard Weber, CNTSC Wetland Hydraulic Engineer, at 817-509-3576, or richard.weber@ftw.usda.gov.

Wildlife Team Highlights

Bill Hohman, CNTSC Wildlife Biologist, is working with an interagency team to develop the baseline assessment and environmental impact statement for the Missouri River Ecosystem Restoration Plan, designed to determine actions required to mitigate losses of aquatic and terrestrial habitat, recover federally listed species under the Endangered Species Act, and restore the ecosystem to prevent further declines among other native species. The product of this process will be the restoration plan and associated environmental impact statement that will guide management and restoration efforts for the Missouri River ecosystem for the next 30–50 years.

Wildlife Technology Development Team-sponsored Biology NetMeetings:

- Conservation Delivery Streamlining Initiative (CDSI) to improve resource inventory and conservation planning. Steve Brady, CNTSC Wildlife Team Leader, has been meeting with the CDSI to ensure biology-based input.
- NetMeeting "Response of Northern Bobwhite and Priority Songbirds to CRP Practice CP33: Habitat Buffers for Upland Birds." Monitoring demonstrates that establishment of CP33 buffers in ~10% of the local landscape produces immediate and substantial (70 – 400%) increases in local densities of bobwhite and several priority upland bird species. However, the magnitude of response to CP33 varies by species, regionally, and over time and bird response may vary with buffer width, vegetation structure, and surrounding landscape context. These buffers have multiple resource benefits in addition to being economically attractive. This NetMeeting was recorded and is posted on the NRCS Biologists SharePoint Site along with the final report of the project.

For additional information, contact Steve Brady, CNTSC Wildlife Team Leader, at 817-509-3285 or steve.brady@ftw.usda.gov.

Personnel News

Douglas C. Wallace is the new NRCS Forester in the National Agroforestry Center in Lincoln, Nebraska, as of March 14, 2010. Mr. Wallace has more than 30 years experience with NRCS, serving as Missouri State Forestor for the past 20 years. He has also served as both Area Resource Conservationist and District Conservationist for NRCS in Illinois. Mr. Wallace brings a broad expertise in addressing forestry and natural resources related issues to the CNTSC. He earned a B.S. degree in Forest Management and a M.S. degree in Forest Ecology, both from the University of Illinois – Champaign. Wallace is a certified Forester with the Society of American Foresters. In his new position, he will provide direct technical assistance, training, and technology transfer on forestry and agroforestry issues.

Chad R. Ellis was selected as a Rangeland Management Specialist on the CNTSC core team in Fort Worth, Texas, effective March 28, 2010. For the past three years, Mr. Ellis has served as the NRCS State Rangeland Management Specialist/GLCI Coordinator in Florida. During his career, he has also served as a Resource Team Leader, District Conservationist, and Rangeland Management Specialist for NRCS, all in Texas. Mr. Ellis brings excellent pastureland and rangeland ecology expertise to the CNTSC. He earned a B.S. degree in Natural Resources Management (wildlife emphasis) from Sul Ross State University in Alpine, Texas, and a M.S. degree in Animal Science (emphasis in range management) from Angelo State University in San Angelo, Texas. In his new assignment as Rangeland Management Specialist, Ellis will provide direct technical assistance, training, and technology transfer on pastureland and rangeland ecology issues.

CNTSC Calendar

Central State Resource Conservationists' Workgroup Teleconference

May 11, 2010, 11:00 a.m. CDT

Contact Cheryl Simmons, CNTSC Technology Specialist, at 817-509-3314, or cheryl.simmons@ftw.usda.gov

Central Environmental Engineers' Teleconference

June 17, 2010, 10:00 a.m. CDT

Contact Cherie LaFleur, CNTSC Environmental Engineer, at 817-509-3303, or cherie.lafleur@ftw.usda.gov

Central State Soil Scientists' Technology Workgroup Teleconference

July 8, 2010, 9:00 a.m. CDT

Contact Edward Griffin, CNTSC Soil Scientist, at 817-509-3304, or edward.l.griffin@ftw.usda.gov

Central State Conservation Engineers' Teleconference

July 12, 2010, 10:00 a.m. CDT

Contact Jerry Walker CNTSC Agricultural Engineer, at 817-509-3387, or jerry.walker@ftw.usda.gov